

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION**

Materials Engineering and Research Laboratory
Technical Service Center
Denver, Colorado 80225

**Aggregate
Riprap
Quality Evaluation**

File C- _____
Compiled by: _____
Checked by: _____
Reviewed by: _____
Submitted by: _____

State	Reg.	Source No.	Latitude:	Longitude:
Sample No.	Material		Date Received	
Deposit Name		Overburden		
Ownership		Volume		
Location				
Sec.	T	R	Meridian	
Feature				
Project				
Remarks				

IMPORTANT NOTICE
INFORMATION CONTAINED IN THIS DATA SHEET REGARDING COMMERCIAL PRODUCTS
MAY NOT BE USED FOR ADVERTISING OR PROMOTIONAL PURPOSES AND IS NOT TO BE
CONSTRUED AS AN ENDORSEMENT OF ANY PRODUCT BY THE BUREAU OF RECLAMATION

Grading (Des. 4, 5, 6) Cum. % retained															
Sieve	Pit Run	3" - 1 1/2"	1 1/2" - 3/4"	3/4" - #4	Fine Agg.	Washed Fine Agg.	Test Results	6" - 3"	3" - 1 1/2"	1 1/2" - 3/4"	3/4" - 3/8"	3/8" - #4	Fine Agg.	Washed Fine Agg.	
6 in.							Sp. Gr., S.S.D. (Des. 9,10)								
3 1/2 in.							Absorption, % (Des. 9,10)								
3 in.							Organic Impurities, (Des. 14)								
2 1/2 in.							Percent Silt (Des. 16)								
1 3/4 in.							% Lighter - Sp. Gr. (Des. 17, 18, 41)								
1 1/2 in.							Friable Particles, % (Des. 13)								
1 1/4 in.							Sand Equivalent								
7/8 in.							NA ₂ SO ₄ Loss, 5 cyc. Weighted % Loss (Des. 19)								
3/4 in.							L.A. Abrasion (Des. 21) Grading	"A"	"B"	"C"	"D"				
5/8 in.							% Loss, 100 Revolutions								
3/8 in.							% Loss 500 Revolutions								
5/16 in.							Freezing and Thawing Data	Concrete							
No. 4						w/c ratio		Slump (inches)	% Air Meter	H ₂ O Lbs. / yd ³	28-day strength 3" x 6"	Weight Loss, %	Cycles		
No. 5															
No. 8															
No. 16															
No. 30								Riprap							
No. 50								Weight Loss, % 3 inch cube		Cycles					
No. 100								Alkali - Aggregate Reactivity Data							
Pan							Materials	Sand				Gravel			
F.M							Cement No.								
% Sand							Soda Equivalent								
							Test Agg. %	100	100	50	25	100	100	50	25
							Exp. % - 6 Mo.								
							Exp. % - 12 Mo.								

PETROGRAPHIC SUMMARY: MEMORANDUM NO. _____ DATE: _____